

September 18, 2001

## PROCESS EVALUATION

**D**r. Carolyn Berry, community psychologist and associate research professor at New York University, spoke to CAP grantees on September 18, 2001 about process evaluation. Dr. Berry discussed the reasons programs are evaluated, and described specific components of process evaluation to help provide a clear frame of reference for grantees as they conduct program evaluation under CAP grant requirements. The following is Dr. Berry's presentation.

### Part I: Evaluation In General

Evaluation research actually covers a number of distinct, yet overlapping, research activities, and any one evaluation may encompass one or more of these activities. Which of these approaches or combinations of approaches an evaluator chooses will depend on the stage of the program, the resources available, the access to data, and the program and evaluation goals.

### Evaluation Activities Chart

The following chart details typical program stages and corresponding evaluation activities.

Stage of Program	Questions	Evaluation Function
Assessment of social problems and needs	<p>To what extent are community needs being met currently?</p> <p>Does the problem that this program wants to address exist?</p>	<p>Needs assessment</p> <ul style="list-style-type: none"> <li>- Social Indicators</li> <li>- Perception of need</li> </ul>
Assessment of need for a program	What needs exist?	Problem Description
Determination of goals	<p>What must be done to meet existing needs and standards?</p> <p>What must be done to address the needs we identified or have otherwise decided to address?</p>	<p>Needs Assessment</p> <p>Assessment of service needs</p> <p>Feasibility Study</p> <p>Assessment of Acceptability</p>

Design of program or program alternatives	What services/programs could achieve our goals?	Assessment of program logic or theory  Feasibility Study  Assessment of Acceptability
Selection of alternative	Which program or set of services is best?	Assessment of program logic or theory  Feasibility Study  Assessment of Acceptability  Formative Evaluation
Program Implementation	How should the program be put into operation?  How is the program being implemented? (or was)	Process Evaluation  Formative Evaluation  Implementation Assessment
Program operation	Is the program operating as planned?  What are the program outputs?	Process Evaluation  Formative Evaluation  Implementation Assessment  Summative Evaluation
Program Outcomes	Is the program having the desired effects?  Are there unintended effects?	(Summative Evaluation)  Outcome Evaluation  Impact Evaluation/Assessment
Program Efficiency	Are program effects attained at a reasonable cost?	Cost-benefit Analysis  Cost-effectiveness Analysis

Following is an overview of potential activities for each general program stage:

### Prior to Program Existence

- ❑ **Needs Assessment** – A study to determine the existence, nature, and scope of the problem.
- ❑ **Assessment of Service Needs/Assessment of Acceptability** – A study that focuses on a specific need and additional services that may be required or would be helpful.
- ❑ **Feasibility Study** – A study that may include service acceptability, but also examines available resources, political will, and other related factors.

## During Program Design and Planning

- ❑ **Assessment of Program Theory** - Explication and assessment of the underlying assumptions that link program resources, program activities, program outputs, outcomes and long-term impacts
- ❑ **Feasibility** - At this stage, a feasibility assessment tests specific operational aspects of the program to establish whether they can or do occur as planned
- ❑ **Acceptability** – An assessment of how participants are perceiving new services or programs and how appropriate and acceptable these services are to the target population

## During Program Implementation

- ❑ **Process Evaluation** – A general, comprehensive term for an overall study that often encompasses other methodologies and focuses on resources, activities and outputs.
- ❑ **Formative Evaluation** – A form of process evaluation where feedback is provided and shaping the program is an explicit goal.
- ❑ **Implementation Assessment** – A term that is generally interchangeable with process evaluation. More commonly used when a program is beyond its early stages and evaluators are verifying the program before conducting an impact assessment or assessing the fidelity of initial program plans.
- ❑ **Summative Evaluation** – The most quantitative part of comprehensive process evaluation that assesses program outputs. Summative evaluation benchmarks that the program is operating as designed. It is similar in activities/data to program monitoring, although the purposes are slightly different.
- ❑ **Program Monitoring** – An ongoing assessment that is not technically an evaluation activity but often overlaps with evaluation activities. Program monitoring goals typically include 1) accountability and 2) program management.

Program monitoring activities overlap with process evaluation, especially in its summative aspects. However, this process differs in terms of its continuing time frame and internal focus, and, often, in terms of the person who performs it (program staff v. identified evaluator). In contrast, process evaluation is usually conducted in a specified time frame, has an external as well as internal audience, and is done by designated persons, often outside evaluators.

## To Determine Program Outcomes/Effectiveness/Efficiency

- ❑ **Outcome/Impact Evaluation/Assessment** – A study that focuses on the long-term aspects or outcomes of program activities.
- ❑ **Cost-Benefit/Cost-Effectiveness Analysis** – An analysis that is conducted only when impact evaluation has yielded measurable positive program impacts.

The purposes of these evaluation activities clearly overlap, and any one evaluation probably has several purposes. Critical questions to keep in mind are, “purpose for whom?” and “What are the goals of this evaluation?”

## Part II: Process Evaluation

### Why is process evaluation so important?

Process evaluation is usually quite distinct from impact assessment, in terms of timing and goals, and often in terms of activities. Process evaluation occurs before impact evaluation. Most evaluators consider a process evaluation of some, even limited scope, a pre-requisite for a meaningful outcomes or impact assessment. Process evaluation looks at the program itself and its immediate outputs, while impact assessment focuses on what happens as a **result** of the program.

Process evaluation also helps link the program theory or logic model to the impact assessment by illuminating program activities and outputs. It establishes that program activities and associated outputs work as planned and that the underlying assumptions hold true. Furthermore, if the impact evaluation fails to determine positive results, the process evaluation will demonstrate whether a flawed implementation or flawed process model may have been responsible.

### Process Evaluation Informs Impact Evaluation:

- ❑ By guaranteeing the existence of an intervention prior to an impact evaluation
- ❑ By determining whether a program is ready for impact evaluation by: performing a manipulation check and strong v. weak test; determining whether a program is fully (or fully enough) implemented; or ensuring a fair test of the program model
- ❑ By guiding an impact evaluation and identifying questions to ask, in light of program theory
- ❑ By unlocking the “black box” and clarifying what is being evaluated

## Process Evaluation Informs An Existing Program:

- ❑ By assisting in implementation through feedback and subsequent fine-tuning. Program monitoring activities fall into this category.
- ❑ By officially documenting both internal and external program components

## Process Evaluation Informs Future Interventions:

- ❑ By determining how and/or why a program worked or did not work, thus helping to interpret impact evaluation results
- ❑ By teasing out which program aspects worked or did not work
- ❑ By refining and testing logic model components (process theory, activities, and outputs)
- ❑ By helping determine whether subsequent program implementation is feasible and replicable

## Stages of a Process Evaluation

### 1) Determine an Approach

There are three primary approaches to process analysis to consider, each combining qualitative and quantitative techniques:

- ❑ **Description/Documentation** – Involves thorough documentation of program activities.
- ❑ **Discrepancy** – Examines how program implementation matches the original program plan.
- ❑ **Comparison of Sites** – Compares program implementation factors across multiple sites.

Depending on the approach taken, analysis and utilization of results may differ, but each approach comprises essentially similar activities and generates similar kinds of data. Note that the discrepancy approach does not, in any sense, imply criticism. Infidelity to an original blueprint is not always negative. The blueprint may change as a result of process evaluation.

### 2) Establish Evaluation Criteria

Three categories of program information are typically considered in criteria development:

- ❑ **Target Participation (coverage & bias)** – Critical program criteria include determination of what percentage of the target population is being served; whether program participants are members of the target population; and whether any targeted sub-groups may be over- or under-represented.

Determination of program participation as a percentage of target capacity is also a critical criterion and an important cost consideration.

- ❑ ***Delivery of Intervention*** – The primary focus of most process evaluations. When evaluating programs, delivery of intervention focuses on program activities, prioritized according to whatever model has been established. Criteria should include external measures, related to the current political, economic, legislative, and policy environment that impact program implementation as well as key internal program component measures. Determining obstacles and facilitators to program development is another very important consideration.
- ❑ ***Program Infrastructure*** – Evaluation criteria will include the number of current and projected program staff, their credentials, and staff turnover rates. The program organizational structure, availability of appropriate training, and other resources listed in the logic model should also be considered.

The program logic model should be used to guide efforts to develop specific questions that the process evaluation will address. The best approach to answering those questions will be determined by selecting from a broad range of data collection methods.

### 3) **Collect Data**

As with process evaluation approaches, data collection methods vary and are selected according to the approach taken and the information sought. Some methods to consider, and the primary advantages and disadvantages of each, include:

- ❑ ***Document Review*** – This process includes review of program documentation including the original proposal, organizational flow-sheets, staff resumes, client-contact logs, training materials, encounter forms, educational materials, case reports, medical charts, demographic data on clients, documentation on policy compliance, minutes from meetings, progress reports, and other information used to monitor the program.

**Advantage:** The information is readily available; there is no primary data collection involved and no evaluator bias to confound the study.

**Disadvantage:** The content information is often difficult to code, may be unreliable, incomplete, biased, and may not address all evaluation criteria.

- ❑ ***Primary Quantitative Data Collection*** – This involves developing surveys, forms or other tracking tools designed *specifically for the evaluation*. It may include patient satisfaction surveys, health evaluation forms, and other systematic assessment instruments.

**Advantage:** Data can be collected from a sample rather than a survey of the entire target population. If useful, tools developed may become part of ongoing program monitoring.

**Disadvantage:** Developing and implementing these methods requires dipping in to limited resources, including money from the project budget and time from the project staff and evaluator.

- ❑ **Observational Techniques:** An evaluator or previously trained staff observe and document program activities either as an outsider or, in the case of participant observation, a pseudo participant. Examples of processes to be observed include staff trainings, key meetings, and patient-provider interactions.

**Advantage:** Provides very rich data and remains under the control of an evaluator.

**Disadvantage:** The observer may affect what is being observed, thus confounding the results; it may be very time-consuming, and data generated may be difficult to code.

- ❑ **Key Informant Interviewing, Site Visits, and Focus Groups:** It is always a good idea to physically visit sites to assess physical layout and visual atmosphere. Staff and members of the targeted population can be interviewed along with representatives of the community not directly involved in interventions. The best approach is typically the semi-structured interview format, which allows the interviewee to be more comfortable and forth coming, and the interviewer to probe for information as appropriate.

**Advantage:** Provides rich data under the control of an evaluator; is less time-consuming than natural observation; and generally more structured and easier to code.

**Disadvantage:** Developing protocols and interview or moderator guides takes time, and the resulting scenario is not as "natural" as observation.

Dr. Berry concluded the discussion by acknowledging that grantees' approaches to evaluation requirements under the CAP grant will vary depending on four primary considerations:

- ❑ The designated **time frame**
- ❑ The amount of **money** available for evaluation
- ❑ The **complexity** of program design
- ❑ The level of detail needed from the evaluation